

Claim Summary

Claims 1, 2, 4, 6-8, 10, 11, 13, 15-17, 27, 37, 47 and 52 are amended. Claims 5, 14, 29, 39, are cancelled. For the Examiner's convenience, and in accordance with the revised amendment format permitted by the Patent Office, a complete listing of the claims is set forth below with corresponding status identifiers for each claim.

Amended Claims

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1. (Currently Amended) A method for enabling advanced
recording options on a personal versatile recorder (PVR),
comprising:

receiving at the PVR a plurality of television signals;

providing for the recording of one or more television programs at the PVR; and

automatically suspending recording, based on predetermined criteria detected by said PVR, for at least a portion of time during which said one or more television programs would otherwise be recorded;

providing an end of program notifier in said
television signal which identifies the end of the program;
and

continuing recording of the program until receipt of
the notifier.

2. (Currently Amended) A method in accordance with claim 1, wherein;

recording is suspended during the time when nonprogram specific content is received at the PVR; and the predetermined criteria comprises said EPG data.

3. (Original) A method in accordance with claim 1, wherein said predetermined criteria comprises at least one of EPG data or Advanced Television Enhancement Forum (ATVEF) triggers.

4. (Currently Amended) A method in accordance with claim 1, wherein:

recording is suspended when a rerun of a program is detected; and

the predetermined criteria comprises said EPG data.

5. (Cancelled).

6. (Currently Amended) A method in accordance with claim 5 1, wherein:

said end of program notifiers are provided in one of ATVEF trigger information, a vertical blanking interval of an analog television signal, or a program identifier of a digital television signal.

7. (Currently Amended) A method in accordance with claim 5 1, wherein:

each television program has a program end time;
the PVR waits a predetermined amount of time after
said program end time to receive the end of program
notifier; and

recording of the program is terminated at the first to occur of (i) lapsing of the predetermined amount of time, and (ii) receipt of the end of program notifier.

8. (Currently Amended) A method in accordance with claim $\frac{5}{2}$, further comprising:

providing additional information to the PVR indicating that the program supports said end of program notifiers, thereby configuring said PVR to terminate the recording based on said notifier.

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- 9. (Original) A method in accordance with claim 8, wherein: said additional information is provided in one of EPG data, ATVEF trigger information, a vertical blanking interval of an analog television signal, or a program identifier of a digital television signal.
- 10. (Currently Amended) A personal versatile recorder (PVR) having advanced recording options, comprising:
- a receiver for receiving a plurality of television signals;
- a storage device for recording of one or more television programs at the PVR; and
- a processor for automatically suspending recording, based on predetermined criteria detected by said processor, for at least a portion of time during which said one or more television programs would otherwise be recorded;

wherein:

an end of program notifier is provided in said television signal which identifies the end of the program; and

recording of the program is continued until receipt of the notifier.

11. (Currently Amended) Apparatus in accordance with claim 10, wherein;

recording is suspended during the time when nonprogram specific content is received at the PVR; and the predetermined criteria comprises said EPG data. 12. (Original) Apparatus in accordance with claim 10, wherein said predetermined criteria comprises at least one of EPG data or Advanced Television Enhancement Forum (ATVEF) triggers.

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13. (Currently Amended) Apparatus in accordance with claim 10, wherein:

recording is suspended when a rerun of a program is detected; and

the predetermined criteria comprises said EPG data.

- 14. (Cancelled).
- 15. (Currently Amended) Apparatus in accordance with claim 14 10, wherein:

end of program notifiers are provided in one of ATVEF trigger information, a vertical blanking interval of an analog television signal, or a program identifier of digital television signal.

16. (Currently Amended) Apparatus in accordance with claim 14 10, wherein:

each television program has a program end time;
the PVR waits a predetermined amount of time after
said program end time to receive the end of program
notifier; and

recording of the program is terminated at the first to occur of (i) lapsing of the predetermined amount of time, and (ii) receipt of the end of program notifier.

17. (Currently Amended) Apparatus in accordance with claim 14 10, wherein:

additional information is provided to the PVR indicating that the program supports end of program notifiers, thereby configuring said PVR to terminate the recording based on a notifier.

18. (Original) Apparatus in accordance with claim 17, wherein:

said additional information is provided in one of EPG data, ATVEF trigger information, a vertical blanking interval of an analog television signal, or a program identifier of a digital television signal.

19. (Original) A method for enabling advanced recording options on a personal versatile recorder (PVR), comprising the steps of:

receiving at the PVR a plurality of television signals and associated electronic programming guide (EPG) data;

providing for recording of one or more television programs at the PVR; and

automatically preventing the recording of program reruns based on the EPG data.

- 20. (Original) A method in accordance with claim 19, wherein said preventing step is controlled by a cable headend operator via authorization commands to the PVR.
- 21. (Original) A method in accordance with claim 19, wherein said preventing step is controlled by a user through an interface at the PVR.

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22. (Original) A method in accordance with claim 19, wherein the PVR is one of a set-top terminal, a digital television, or a personal computer.

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23. (Original) A personal versatile recorder (PVR) having advanced recording options, comprising:

a receiver for receiving a plurality of television signals and associated electronic programming guide (EPG) data;

a storage device for selectively recording one or more television programs at the PVR; and

a processor for automatically preventing the recording of program reruns based on the EPG data.

- 24. (Original) Apparatus in accordance with claim 23, wherein said processor is enabled to prevent the recording of reruns by a cable headend operator via authorization commands to the PVR.
- 25. (Original) Apparatus in accordance with claim 23, wherein said processor is enabled to prevent the recording of reruns by a user through an interface at the PVR.
- 26. (Original) Apparatus in accordance with claim 23, wherein the PVR is one of a set-top terminal, a digital television, or a personal computer.
- 27. (Currently Amended) A method for enabling advanced recording options on a personal versatile recorder (PVR), comprising the steps of:

receiving at the PVR a plurality of television signals;

providing for recording of one or more television programs at the PVR; and

automatically suspending recording, based on Advanced Television Enhancement Forum (ATVEF) triggers, when non-program specific content is received at the PVR;

during the suspension of recording of non-program specific content, storing said non-program specific content to a location separate from the location where the program is being recorded.

- 28. (Original) A method in accordance with claim 27, wherein said non-program specific content comprises one of a special announcement, an emergency broadcast, or a commercial.
- 29. (Cancelled).
- 30. (Original) A method in accordance with claim 27, wherein said recording of one or more television programs is based on one of EPG data or VCR Plus codes.
- 31. (Original) A method in accordance with claim 27, wherein said suspending step is controlled by a cable headend operator via authorization commands to the PVR.
- 32. (Original) A method in accordance with claim 27, wherein said suspending step is controlled by a user through an interface at the PVR.

a 5 cust 33. (Original) A method in accordance with claim 27, wherein the PVR is one of a set-top terminal, a digital television, or a personal computer.

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34. (Original) A method in accordance with claim 27, wherein:

said ATVEF triggers further comprise an end of program notifier which identifies the end of a program; and

recording of the program is continued until receipt of the notifier.

35. (Original) A method in accordance with claim 34, wherein:

each television program has a program end time;
the PVR waits a predetermined amount of time after
said program end time to receive the end of program
notifier; and

recording of the program is terminated at the first to occur of (i) lapsing of the predetermined amount of time, and (ii) receipt of the end of program notifier.

36. (Original) A method in accordance with claim 34, wherein:

said ATVEF triggers further comprise additional information indicating that the program supports said end of program notifiers, thereby configuring said PVR to terminate the recording based on said notifier.

37. (Currently Amended) A personal versatile recorder (PVR) having advanced recording options, comprising:

a receiver for receiving a plurality of television signals;

a storage device for selectively recording one or more television programs at the PVR; and

a processor for automatically suspending recording, based on Advanced Television Enhancement Forum (ATVEF) triggers, when non-program specific content is received at the .PVR;

wherein during the suspension of recording of nonprogram specific content, said non-program specific content is stored to a location separate from the location where the program is being recorded.

38. (Original) Apparatus in accordance with claim 37, wherein said non-program specific content comprises one of a special announcement, an emergency broadcast, or a commercial.

39. (Cancelled).

- 40. (Original) Apparatus in accordance with claim 37, wherein said storage device records the one or more television programs based on one of EPG data or VCR Plus codes.
- 41. (Original) Apparatus in accordance with claim 37, wherein said processor is enabled to suspend recording by a cable headend operator via authorization commands to the PVR.



42. (Original) Apparatus in accordance with claim 37, wherein said processor is enabled to suspend recording by a user through an interface at the PVR.

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- 43. (Original) Apparatus in accordance with claim 37, wherein the PVR is one of a set-top terminal, a digital television, or a personal computer.
- 44. (Original) Apparatus in accordance with claim 37, wherein:

said ATVEF triggers further comprise an end of program notifier which identifies the end of a program; and

recording of the program is continued until receipt of the notifier.

45. (Original) Apparatus in accordance with claim 44, wherein:

each television program has a program end time;
the PVR waits a predetermined amount of time after
said program end time to receive the end of program
notifier; and

recording of the program is terminated at the first to occur of (i) lapsing of the predetermined amount of time, and (ii) receipt of the end of program notifier.

46. (Original) Apparatus in accordance with claim 44, wherein:

said ATVEF triggers further comprise additional information indicating that the program supports end of program notifiers, thereby configuring said PVR to terminate the recording based on a notifier.

47. (Currently Amended) A method for enabling advanced recording options on a personal versatile recorder (PVR), comprising:

receiving at the PVR a plurality of television
signals;

providing for the recording of one or more television programs at the PVR;

providing an end of program notifier <u>in said</u>

<u>television signal</u> which identifies the end of a program;

and

continuing recording of the program until receipt of the notifier.

48. (Original) A method in accordance with claim 47, wherein:

end of program notifiers are provided in one of ATVEF trigger information, a vertical blanking interval of an analog television signal, or a program identifier of a digital television signal.

49. (Original) A method in accordance with claim 47, wherein:

each television program has a program end time;
the PVR waits a predetermined amount of time after
said program end time to receive the end of program
notifier; and

recording of the program is terminated at the first to occur of (i) lapsing of the predetermined amount of time, and (ii) receipt of the end of program notifier.

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50. (Original) A method in accordance with claim 47, further comprising:

providing additional information to the PVR indicating that the program supports end of program notifiers, thereby configuring said PVR to terminate the recording based on a notifier.

51. (Original) A method in accordance with claim 50, wherein:

said additional information is provided in one of EPG data, ATVEF trigger information, a vertical blanking interval of an analog television signal, or a program identifier of a digital television signal.

52. (Currently Amended) A personal versatile recorder (PVR) having advanced recording options, comprising:

a receiver for receiving a plurality of television signals, said television signals comprising television programs and end of program notifiers which identify the end of programs;

a storage device for recording of one or more television programs at the PVR; and

a processor for automatically terminating recording based on said end of program notifiers.

53. (Original) Apparatus in accordance with claim 52, wherein:

said end of program notifiers are provided in one of ATVEF trigger information, a vertical blanking interval of an analog television signal, or a program identifier of a digital television signal.

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54. (Original) Apparatus in accordance with claim 52, wherein:

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each television program has a program end time;
the PVR waits a predetermined amount of time after
said program end time to receive a respective end of
program notifier; and

recording of the program is terminated at the first to occur of (i) lapsing of the predetermined amount of time, and (ii) receipt of the end of program notifier.

55. (Original) Apparatus in accordance with claim 52, wherein:

additional information is provided to the PVR indicating that the program supports said end of program notifiers, thereby configuring said PVR to terminate the recording based on a notifier.

56. (Original) Apparatus in accordance with claim 55, wherein:

said additional information is provided in one of EPG data, ATVEF trigger information, a vertical blanking interval of an analog television signal, or a program identifier of a digital television signal.